PROJECT FACT SHEET

CONTRACT TITLE: Research on Improved and Enhanced Oil Recovery in Illinois through Reservoir Characterization-Annex I

DATE REVIEWED: 02/01/93 **DATE REVISED:** 12/09/92

OBJECTIVE: To increase knowledge of Illinois reservoir characterization and trends and to encourage development of new production from known reservoirs.

ID NUMBER: DE-FG19-89BC14250

B & R CODE: AC1510100

CONTRACT PERFORMANCE PERIOD:
06/28/89 to 06/27/93
PROGRAM: Lt Oil
RESEARCH AREA:

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DOE PROJECT MANAGER:
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CONTRACT PROJECT MANAGER:

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PROJECT SITE:
Illinois State Geological Survey
Champaign, IL

SCHEDULED MILESTONES:

Develop oil and gas database	01/90
Characterize reservoir heterogeneity and fluid properties	06/90
Demonstrate applicability of seismic & acoustical logging techniques to increased production	12/91
Final Report	07/93

FUNDING (1000'S)	DOE	OTHER	CONTRACTOR	TOTAL
PRIOR FISCAL YRS	2,429	0	4,398	**6,827**
FISCAL YR 1993	0	0	0	**0**
FUTURE FUNDS	0	0	0	**0**
TOTAL EST'D FUNDS	**2,429**	**0**	**4,398**	**6,827**

PROJECT DESCRIPTION: The intended research will:

1) develop a public Illinois oil and gas database for evaluating resources available for infill drilling and/or enhanced recovery,

2) characterize reservoir heterogeneity and fluid properties important to defining potential additional reserves,

3) demonstrate the applicability of seismic and acoustic logging techniques to increasing hydrocarbon production, and

4) transfer the technologies to oil operators through publications and workshops.

PRESENT STATUS: Final funding is in place to complete the work included in the twelve-task project. Funding will lapse in December 1992; final reporting should be accomplished by July 1993. Work in progress includes completion of several pool studies, interpretation of seismic lines, completion of outcrop interpretation and completion of engineering studies. The last industry advisory committee meetings were held on November 18, 1992.

ACCOMPLISHMENTS: The project continues to run on schedule. A workshop was held on November 18, 1992 in Mt. Vernon, Illinois. The workshop was attended by 145 independent operators who heard presentations related to the topic: "Working Toward Improved Recovery of Mobile Oil in Illinois Reservoirs".

A third paper, IP 137: "Reservoir Heterogeneity and Potential for Improved Oil Recovery Within the Cypress Formation at Bartelso Field, Clinton County, Illinois," by Stephen T. Whitaker and Andrew K. Finley, was published. IP 138, "Reservoir Characterization of Multiple Bar, Cypress Formation (Mississippian) Sandstones, Tamaroa and Tamaroa South Fields, Perry County, Illinois" will be published within a month.

BACKGROUND: Part of the Federal/State Program initiated in FY88 - This project provides demonstration and information useful to independents.

This project provides information that is used to maximize hydrocarbon production, minimize formation damage and stimulate production in Illinois. Twelve project tasks are designed to examine in detail the subsurface oil reservoirs of Illinois, thereby increasing knowledge of reservoir components and behavior. These studies are instrumental in developing methodologies to potentially increase the amount of recovered oil. Information provided includes assessment of hydrocarbon resources including an estimate of unrecovered mobile oil, characterization of hydrocarbon reservoirs, and the description of methods that will improve hydrocarbon extractive technology. Methods of analysis of reservoir complexities include subsurface mapping using logs, core analyses, clay identification, petrographic thin sections, and predictive computer modeling.